

AP Biology

About the Institute: The Biology Advanced Placement Institute is a six-day intensive laboratory program designed to provide high school AP Biology teachers an introduction to the College Board's AP Program and prepare them to teach the AP biology curriculum. Teachers currently teaching AP Biology and who need additional training in laboratory techniques are also welcome. Institute participants will receive intensive hands-on instruction and perform all twelve AP recommended labs. Upon completion of this institute, participants will have the knowledge and confidence to run all twelve AP labs, make them run efficiently, and know the costs and best sources for the purchase of equipment and supplies. Sessions will run all day including some evenings. Each day will consist of pre-lab discussions followed by hands-on laboratories covering all twelve AP Biology labs. All participants will be provided with lab manuals, AP College Board manuals, and textbooks.

Instructors: John Gehring who has over seventeen years experience in teaching AP biology and AP Biology Summer Institutes will teach the institutes. He will be assisted by Robert Hamilton who has over eight years experience teaching AP Biology and AP Biology Summer Institutes.

AP Chemistry

About the Institute: Intended for beginning and experienced AP teachers, this workshop will model an AP chemistry curriculum. Participants will be introduced to both the hands-on and theoretical aspects of kinetics, chemical equilibrium, acid-base chemistry, electrochemistry, molecular structure and descriptive chemistry. Participants will have the opportunity to work on problem-solving strategies and review past AP exams. Mornings will concentrate on lecture and strategies, afternoons will be laboratory oriented and evenings will include problem-solving sessions.

Instructor: Ann Levinson has over 15 years experience as an AP Chemistry teacher, and is a recipient of the Davidson Award for Chemistry Teaching in Illinois, 1996 and the American Chemical Society Great Lakes Regional Award for High School Chemistry Teaching, 2002

AP Calculus - AB

About the Institute: The AP Calculus Institute will review the basic concepts of differential and integral calculus using both the multiple-choice and free response questions from previous AP exams. There will be lots of hints about teaching certain concepts and activities in your classes, demonstration of computer programs that are helpful, and hints on using the graphing calculator. All those enrolled in the course should bring their graphing calculator with them. Participants will be working (and having a great time) in groups throughout the week as they explore the concepts and big ideas of calculus.

Instructor: Rosemary Gundacker has been teaching AP Calculus since 1989 and reader for the AP exam since 1998. She was chosen to be a table leader for the reading this June in Colorado. She has been a consultant for the College Board doing AP Calculus workshops since 1999 and has been doing summer workshops at Augsburg College in Minnesota for the last three years. In addition to her work with AP Calculus, she is district director and member of the Best Practice Network, concerned about quality mathematics for all students.

Institute Agenda

The **Calculus** and **Chemistry AP** institutes will begin on Sunday evening at 6 pm, and conclude on Friday at noon. There will be evening problem sessions. The **AP Biology Institute** will begin on Sunday evening at 6 pm and conclude on Saturday at noon. All participants will be provided with lab manuals, AP College Board manuals, and textbooks.

Registration Fees

All teachers who are currently teaching AP Biology, Chemistry and Calculus as well as those who are preparing to teach AP for the first time in the future are encouraged to participate.

There will be no cost for teachers coming from Michigan school districts that have more than 33% eligibility for free or reduced lunch due to support by the Michigan Department of Education's Advanced Placement Incentive Program. However, participants

will be required to submit \$195 application fee with their application. This fee will be refunded upon attending the entire institute.

The cost for all other schools is \$795 (includes tuition, room and board in university housing).

Optional college credit up to 3 credits is available at the current semester hour rate. Additional assignments will be required.

Five (5) SB-CEU's will be available at no extra charge.

Registration Details

Location: Ferris State University, Science Bldg, 2nd Floor, Department of Biological Sciences, Big Rapids, 49307
231.591.2550

Housing and food: All participants will be provided housing in university residence halls. Breaks, lunch daily and evening meals will be provided for all participants at the university dining halls.

Registration Deadline: May 21, 2004

Registration is limited to 24 teachers per institute. All teachers are encouraged to reserve their seats ASAP via email to hoerterj@ferris.edu or by mailing to Dr. Jim Hoerter, Department of Biological Sciences, ASC 2004, Ferris State University, Big Rapids, MI 49307. **Space is limited, please register early.**

Additional information: Contact **Jim Hoerter at 231.591.2550**

E-mail hoerterj@ferris.edu.

Refer to website at www.ferris.edu/apinstitutes

Register early! A letter of confirmation, additional information and map will be sent upon receipt of registration. Please submit one registration form per person. Ferris State University reserves the right to cancel the institutes due to insufficient enrollment.

☑ Mail or fax (231-591-2540) completed registration ASAP to: *AP Biology Institute*, Ferris State University, Dept. Biological Sciences, ASC 2004, Big Rapids, MI 49307 or email information to Jim Hoerter (hoerterj@ferris.edu).

AP Biology, Calculus and Chemistry Summer Institute

June 20-26, 2004

Name_____

School_____

School Address_____

City_____

State_____Zip_____

Daytime Phone_____

Fax_____

Email_____

Summer Address_____

City_____

State_____Zip_____

Home Phone_____

Check One: ☐ AP Biology ☐ AP Chemistry ☐ AP Calculus (AB)

☐ **I am interested in 5 SB-CEU's (no charge)**

☐ **I am interested in college credit (additional tuition fee)**

☐ **I am not interested in receiving college credit or SB-CEU's**

Housing: Indicate if you will need on-campus housing for the Ferris State University Institute. **(No cost reduction for teachers who stay off campus)**

☐ **Yes** ☐ **No**

Email (hoerterj@ferris.edu) or fax (231-591-2540) this information or mail form to Jim Hoerter, AP Biology Institute, Department of Biological Sciences, ASC 2004, Ferris State University, Big Rapids, MI 49307

Registration Deadline: May 21, 2004

☐ **Yes, my school district has more than 33% of students eligible for free or reduced lunches. Please invoice my school for the \$195 institute fee. (Fee will be reimbursed if you attend the entire institute)**

☐ **No, my school district does not qualify. Please invoice my school for the \$795 institute fee.**

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BIG RAPIDS MI 49307
PERMIT NO.77



Biology Summer Institute
Ferris State University
Department of Biological Sciences
ASC 2004
Big Rapids, MI 49307
231.591.2550 - Fax 231.591.2540

Affirmative Action/Equal Opportunity Employer

Biology Chemistry Calculus - AB

Advanced Placement Summer Institutes

**Endorsed by
The College Board**

*Support Provided by
Michigan Department of Education*

**Ferris State University
Big Rapids, MI**

June 20-26, 2004

Sponsored by
Ferris State University
Department of Biological Sciences
&
Extended Learning

www.ferris.edu/apinstitutes

2004